1995 LAND USE AND LAND COVER

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

DATA LAYER NAME:	LU95
DATA LAYER DESCRIPTION:	1995 land use/cover categorized according to the Florida Land Use and Cover Classification System (FLUCCS). The features were photointerpreted from 1:12,000 USGS color infrared (CIR) digital orthophoto quarter quadrangles.
SECTION/DEPARTMENT:	Mapping and GIS/Resource Data Department
REVISION/DATE:	2.0/January, 2000

These data were not collected under the supervision of a licensed Professional Surveyor and Mapper.

Use caution when performing change detection between this data layer and the 1950 or 1990 land use and land cover data set. These data layers were generated using different source materials, with different positional accuracy, and using different mapping methodologies. Attempts to conduct change detection analysis between these two data layers will result in false changes and silver polygon features.

LINEAGE

Description of Source Material(s)

Name:	1990 land use and land cover Arc/INFO coverages
Scale (ratio):	1:24,000
Projection:	UTM
Datum:	HPGN
Source Media:	Digital Arc/INFO coverages
Condition of Media:	Not Applicable
Date of Materials:	1990 - 1991
Update Schedule:	Every five years

Creator Organization or Individual

Name:	Southwest Florida Water Management District
Address:	2379 Broad Street, Brooksville, FL 34609-6899
Phone:	(352)796-7211

Comments: None

Name:	USGS Digital Orthophoto Quarter Quadrangles
Scale (ratio):	1:12,000

Projection: UTM
Datum: NAD 83
Source Media: Digital imagery
Condition of Media: Fair to excellent.
Date of Materials: 1994 - 1995
Update Schedule: Every five years.

Creator Organization or Individual
Name: USGS
Address: Sioux Falls, SD 57198
Phone: 1-800-USA-MAPS

Comments: The consistency of colors between orthophotos varied widely throughout the project area because of different dates of film acquisition and photo reproduction quality.

Derivation Methods for Data

Pre-automation Compilation

Description: As part of a contract with the District, EarthData photointerpreted land use and land cover features from the USGS digital orthophoto quarter quadrangles. Prior to automation, the digital orthophotos were converted from the USGS BIP format to RGB format for use in Microstation Base Imager. The 1990 land use and land cover was imported from the Arc/INFO format into a Microstation compatible format.

District and EarthData staff made pre- and post-interpretation helicopter overflights of selected areas. Additional locations were field verified as necessary.

Date of Compilation: September 1996 - July 1998.

Creator Organization or Individual
Name: EarthData International
Address: 45 West Watkins Mill Rd, Gaithersburg, MD 20878
Phone: (301)948-8550

Comments: None

Automation Methods

Description: Land use and land cover features were delineated, on screen, using the USGS color infrared (CIR) digital orthophoto quarter quadrangles DOQQs as a back drop. All image analysts had prior experience in wetland and/or land use mapping. The Florida Department of

Transportation's Florida Land Use, Cover and Forms Classification System (FLUCCS) was used for all mapping. Uplands were mapped with a 5 acre minimum mapping unit and using FLUCCS Level II categories. In some upland areas of tree coverage, Level III was used. Wetlands were mapped using a .5 acre minimum mapping unit and using FLUCCS Level III categories. Some open water wetlands were mapped to Level II.

Upland feature boundaries, that were separated by roads, were defined by the centerline of the road. Wetland feature boundaries were defined by the edge of the road. Transportation and power line corridors were mapped when they fell into natural vegetation areas and could be easily identified. In areas where adjacent quadrangles were of different over-flight dates, the more recent photo was used to the fullest extent.

In Microstation, the 1995 land use and land cover features were delineated by digitizing polygons in DGN format over the DOQQs at a scale of 1:8000. The 1990 land use and land cover linework was used a reference. Linework was digitized to fit the feature boundaries as interpreted from the doqqs. Image analyst had the original NAPP 1:40,000 CIR aerial photography to examine where feature boundaries were not easily identified from the DOQQs.

The Microstation DGN files were converted into Arc/INFO coverages and linework completeness checks were performed. Any additional edits were performed using ArcEdit. During this process, linework between adjacent sheets were verified for edgematching. Topology was generated using the Arc/INFO BUILD command. Upon 100% completeness of files, they were converted into Arc/INFO export files for delivery.

Date of Automation: Between September 1996 and July 1998

Creator Organization or Individual
Name: EarthData International
Address: 45 West Watkins Mill Rd, Gaithersburg, MD 20878
Phone: (301)948-8550

Equipment Used: Pentium 200 running WindowsNT 4.0 SP3, Alpha AXP 3000-600 with DEC UNIX

Software Used: Microstation 5.0, Arc/INFO 7.0, ArcView 3.0

Comments: None

COMPLETENESS OF FEATURE CAPTURE

Method: Inspection of on-screen linework was performed, with source materials, by District personnel. The new 1995 linework was displayed over the DOQQs along with the 1990 linework as a reference. The data was visually inspected to note areas where the two data layers differed significantly and to identify incorrect delineations. Errors noted were corrected by District personnel.

Value: It is estimated that 100% of all LULC features defined in the project mapping methodology was captured from the raster images.

Date Determined: Between September 1996 and July 1998

Comments: The value determined does not include errors of omission or incorrect classification of features. It is estimated that all features specified in the project mapping methodology were captured from the raster images.

POSITIONAL ACCURACY

Method: Visual inspection of the 1995 linework over the DOQQs, at a scale of 1:8,000, was used to verify the positional placement of the linework.

Value: Estimated +/- 33.3 feet (National Map Accuracy Standards for 1:12,000).

Date Determined: Between September 1996 and July 1998

Comments: The goal of this project was to rectify and update the existing 1990 land use and land cover data layer using the 1995 DOQQs that meet or exceed National Map Accuracy Standards for 1:12,000. Land use and land cover boundaries are not always well defined, however, given the use of ancillary data sources (e.g. soils data or National Wetlands Inventory) to determine feature boundaries, it is expected that data acreage should be accurate.

ATTRIBUTE ACCURACY

Method: Visual inspection of the 1995 land use and land cover data over the DOQQs. The 1990 land use and land cover data was used as reference data. Additional checks included Arc/INFO's labelerror procedures to verify proper annotation of features.

Value: No statistical accuracy verifications have been done. Based on past projects of a

similar nature it is estimated that classification accuracies of between 80% - 90% can be expected for Level II categories.

Date Determined: Between September 1996 and July 1998

Comments: None

ATTRIBUTE DESCRIPTION

Attribute Name	Attribute Description
FLUCCSCODE	The land use and land cover classification code as defined in the Florida DOT's FLUCCS classification system.
LEV1	Very general classification of land use/cover as defined in the Florida DOT's FLUCCS classification system.
LEV2	Land use classification more detailed than Lev 1 as defined in the Florida DOT's FLUCCS classification system.
LEV3	Detailed classification of Land use/cover as defined in the Florida DOT's FLUCCS classification system.
LEV4	Very specific classification of Land Use/cover as defined in the Florida DOT's FLUCCS classification system.
DATESTAMP	The date the feature was last edited or entered into the map libraries by SWFWMD staff.
FLUCSID	Numeric land use and land cover classification code as defined in the Florida DOT's FLUCCS classification system. Same as the FLUCCSCODE. This item is used as the relate to the relational database
FLUCSDESC	Character description of the FLUCSID (i.e. flucs 1000 = Urban and Built Up)